The reduction of *Acacia burkittii* to *Acacia acuminata* subsp. *burkittii* (*Acacia* sect. *Juliflorae*: Fabaceae, Mimosoideae)

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Abstract

Kodela, P.G. and Tindale, M.D. (National Herbarium of New South Wales, Royal Botanic Gardens, Mrs Macquaries Road, Sydney, N.S.W. 2000, Australia) 1998. The reduction of Acacia burkittii *to* Acacia acuminata *subsp.* burkittii *(*Acacia *sect.* Juliflorae: *Fabaceae, Mimosoideae).* Telopea *7(4): 415–417. Acacia burkittii* is here transferred to *A. acuminata* as subsp. **burkittii**. *Acacia acuminata* subsp. *acuminata* is endemic to south-west Western Australia, while *A. acuminata* subsp. *burkittii* extends from south Western Australia to western New South Wales.

Introduction

Acacia burkittii has long been separated from *A. acuminata* mostly on the basis of phyllode shape and width, as well as other phyllode characteristics which are less consistent or useful such as phyllode curvature and indumentum. An investigation of flowers, legumes and other characters of the two species, however, found them comparable or sufficiently similar that species rank for both is not justified. For example, in both taxa the 4-merous flowers have a calyx dissected by ½ or more with the ± keeled, usually narrow lobes clothed with white or yellowish hairs (mostly on the base, midrib and margins) and having rounded obtuse apices.

A. raudelliana is considered to be conspecific with *A. burkittii* (see also Maslin 1981, Whibley & Symon 1992).

Acacia acuminata Benth. subsp. **burkittii** *(F. Muell. ex Benth.) Kodela et Tindale*, **comb. et stat. nov.**

Basionym: *A. burkittii* F. Muell. ex Benth., Fl. Austral. 2: 400 (1864).

Holotype: Lake Gilles in the interior, [S.A.], *Burkitt* (K); isotypes: MEL *n.v.*, PERTH (fragment) *n.v.*

A. raudelliana W. Fitzg., J. W. Austral. Nat. Hist. Soc. 1: 14 (1904).

Lectotype: Mount Malcolm, W.A., July 1899, *W.V. Fitzgerald s.n.* (NSW 359347, flowering specimen), *fide* Maslin & Cowan (1994); isolectotype: PERTH 00769991. Paralectotype (fruiting specimen): 12 miles [19.2 km] north-east of Kanowna, W.A., Nov 1903, *W.V. Fitzgerald s.n.* (NSW 359348 & 359369, PERTH 00769983 — not ex herb. W.V. Fitzgerald).

Illustrations: Maiden (1917: pl. 224), Rotherham et al. (1975: fig. 486), Armitage (1978: 136 & pl. 46), Costermans (1981: 303), Cunningham et al. (1981: 348), Morrison & Davies (1991: 347), Tame (1992: 58 & pl. 38), Whibley & Symon (1992: 275); all as *A. burkittii*.

Bushy, rounded, spreading or erect shrub or tree to 4 m high, rarely to 10 m high; *bark* dark brown and slightly fissured on main trunks, otherwise smooth, greenish grey, silvery grey or grey. *Branchlets* ± terete, glabrous. *Young shoots* golden-sericeous (more

often seen in specimens of subsp. *acuminata*). *Phyllodes* linear-filiform, usually upright, terete or subterete to rarely somewhat flattened (broader phyllodes, mainly in S.A. & W.A.), (2–)5–16 cm long (rarely longer), 0.5–1.3 mm wide (rarely to 1.5 mm wide), finely multistriate, with central vein sometimes slightly more prominent (in broader phyllodes), normally ciliolate (mainly on upper c. ½) especially towards apex; apex delicately curved, non-pungent, usually puberulous especially along the margins with appressed to suberect, white hairs. *Spikes* (4–)5–15(–17) mm long, (1–)2–3 in phyllode axils, mostly ± sessile, densely flowered, bright or golden yellow. *Flowers* 4-merous. *Legumes* linear, moniliform, convex over seeds, chartaceous. Burkitt's Wattle, Gunderbluey, Pin Bush, Sandhill Wattle, Fine Leaf Jam.

Distribution: extends ± from eastern margin of subsp. *acuminata* in south-eastern Western Australia, through inland South Australia to the western plains of New South Wales. Its distribution (as *A. burkittii*) is illustrated by Hall et al. (1964), Maslin & Pedley (1982), Tame (1992) and Whibley & Symon (1992).

Habitat: often in red earths and calcareous red or brown earths, also sandy soils, in low open woodlands and shrublands, often with mallee, eucalypts or Mulga. Occurs on flat plains (often in areas subject to flooding) or on dunes (sandhills), often forming dense clumps.

Selected specimens: Western Australia: Cosmo Newberry, 23 Oct 1992, *M. Hancock 500* (NSW, PERTH); 20 km S of Paynes Find on Great Northern Hwy, 3 Sep 1984, *B.R. Maslin 5587* (NSW, PERTH); near cemetery, Menzies, 8 Nov 1990, *M. Hancock 314* (NSW, PERTH); 64 miles [103 km] W of Coolgardie, 13 Feb 1971, *M.G. Brooker 6004* (NSW); 57 km E of Hyden on Hyden Norseman track, 28 Nov 1990, *M. Hancock 293* (NSW).

South Australia: along track Cook-Vokes Corner, 21 Aug 1980, *J.Z. Weber 6394* (AD, NSW); c. 102 km N of Cook, 28 km N of Abandant Well, 18 Aug 1980, *N.N. Donner 7241* (AD, NSW); c. 3 km S of 'Koonamore' on road to Yunta, 29 Aug 1984, *E.H. Norris 199* (NSW, MQU); between Hesso and Tent Hill, 19 Aug 1968, *B.J. Blaylock 937* (AD, NSW); 21 miles [33.8 km] S of Port Augusta, towards Whyalla, 11 Sep 1970, *M.D. Tindale 426* (AD, CANB, K, L, NSW, US).

New South Wales: 164.7 km E of Tibooburra on road to Wanaaring, 8 Sep 1989, *R.G. Coveny 13644, B. Wiecek & M. Savio* (AD, BRI, MEL, NSW, PERTH); 'Allundy', Wanaaring, 8 Nov 1977, *D.F. Thompson 1879* (NSW); along Cobar–Wilcannia road, 45 miles [72 km] from Wilcannia, 1 Jan 1956, *J. Martin* (NSW 359259); 'Willgareena', N of Cobar, 4 Sep 1968, *E. D'Arnay 674 & K. Wells* (CANB, NSW); 'Tundulya', c. 25 miles [40 km] SE of Louth, 16 Aug 1968, *C.W.E. Moore 5264* (CANB, NSW); Cobar, 20 Aug 1973, *G.M. Cunningham 840* (NSW); Broken Hill, 2 Dec 1919, *A. Morris 82* (NSW); Lake Cargellico, Oct 1906, *J.L. Boorman* (B, BRI, CANB, CHR, LE, MEL, MO, NSW 171624, NY, P, PERTH, PRE, TL, US); Dareton, 19 Dec 1958, *C. Sparke* (NSW 359326).

Notes: *Acacia acuminata* subsp. *burkittii* differs from subsp. *acuminata* mainly in its narrower, terete to subterete (rarely flattened) phyllodes, normally shorter spikes and often more bushy, shrub habit. In subsp. *acuminata* the cilia on the linear to very narrowly elliptic (tapered both ends) or rarely narrowly oblanceolate phyllodes are more often visible without a 10 times lens than in subsp. *burkittii*. Intermediates occur between the subspecies, possibly reflecting clinal variation in Western Australia, e.g. 96.5 km from Meekatharra to Cue, *I.B. Armitage 244* (NSW); 46 km W of Meekatharra, *M. Hancock 502* (NSW, PERTH); Meekatharra–Mt Margaret region, at Cue on Great Northern Hwy, the Day-David Mine, *I.V. Newman 725* (NSW); 5 miles [8 km] W of Meekatharra, *N.H. Speck 580* (CANB, NSW).

Specimens from South Australia and New South Wales with slightly broader (to 2 mm wide) and ± flat phyllodes warrant further investigation, e.g. S.A.: 5 miles [8 km] E of Ooldea, *B. Copley 3175* (NSW); 80 miles [c. 130 km] N of Yalata, *B. Copley 2654* (AD, NSW); crossing of Phillips R., c. 15 km SW of Ravensthorpe on main road to Ongerup, *L. Haegi 1041* (AD, NSW); N.S.W.: Umberumberka Road, 16 miles [25.7 km]

SW of Broken Hill, *E. Baker* (NSW 256165). Notes on distribution, ecology, cultivation, and the impacts of sheep and rabbit grazing are provided by Whibley & Symon (1992).

Key to subspecies of *A. acuminata*

1 Phyllodes mostly 1.5–9 mm wide, flat. Spikes 10–30 mm long .... subsp. *acuminata*

1* Phyllodes 0.5–1.3(–1.5) mm wide, terete to subterete (rarely ± flat). Spikes mostly 5–15 mm long ..... subsp. *burkittii*

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